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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/045,799	03/23/98	HAYASHI	H

MM51/0105
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WASHINGTON DC 20037

EXAMINER

TAMAI, K

ART UNIT PAPER NUMBER

2834

DATE MAILED: 1/05/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/045,779

Applicant(s)

Hayashi et al.

Examiner

Tamai, Karl I.E.

Group Art Unit

2834



☒ Responsive to communication(s) filed on Oct 28, 1998

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-6 and 9-20 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-6 and 9-20 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of Group I, Claims 1-6 in Paper No. 6 is acknowledged.

Drawings

2. The corrected or substitute drawings were received on 10/28/98. These drawings are acceptable.

Specification

3. The new title "INSERT CONDUCTOR FOR USE IN A GENERATOR AND HAVING STRUCTURE FOR PREVENTING DEFORMATION" has been entered into the file wrapper.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 15-19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the Applicant's admitted prior art. The Applicant's admitted prior art shows a brush holder in a generator having a conductor formed a resin body where the resin body prevent the deformation of the conductor after the resin has cured.

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Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne et al.(Byrne) and Nakazawa et al.(Nakazawa). Byrne teaches a conductor having a plurality of wires 17, an outer frame 18 and connections 17b, and a plastic plate 13 which supports the plurality of wires in the encapsulated body. The plastic plate 13 inherently helps prevent deformation of the wires during encapsulation in an insulating body. Byrne teaches the wires are encapsulated in plastic. Nakazawa teaches an insert conductor which is encapsulated by resin insert molding. It would have been obvious to a person skilled in the art at the time of the invention to construct the insert conductor of Byrne with the insert conductor sealed by resin insert molding because Nakazawa teaches that resin effectively seals the conductor and circuit elements from the outer environment with a compact thickness, and because Byrne suggests that any suitable insulating material can be used.

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8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne and Nakazawa, in further view of Huber. Byrne and Nakazawa teach every aspect of the invention, as discussed above, except the insert conductor and plastic plate deform preventer used in as a connector in a brush holder. Byrne teaches an encapsulated wiring device with the internal wires having an insulating support. Huber teaches an insert conductor molded in a brush holder. It would have been obvious to a person skilled in the arts at the time of the invention to construct the insert conductor of Byrne in a brush holder because Huber teaches that insert conductors with are molded into brush holders to form an integrated body, and with the plastic plate of Byrne because it provides insulating support to the wires.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne and Nakazawa, in further view of Yoshida. Byrne and Nakazawa teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Yoshida teaches that polyphenylene sulfide is used in is used in integrated circuits as an insulating layer. It would have been obvious to a person skilled in the art at the time of the invention to construct the insert conductor of Byrne with the deform preventer made of polyphenylene sulfide resin because Yoshida teaches that polyphenylene sulfide resin provides good adhesion and a firm adhesive property.

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10. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art and Murata. The Applicant's admitted prior art teaches every aspect of the invention, as discussed above, except an insulating member to prevent the conductor from being deformed by resin injection during the resin molding. Murata teaches an insert conductor for a magnetic device which has a resin premold to help support the conductors molded in an injection molded resin to provide a skeletal framework for the components which are to be injection molded. It would have been obvious to a person skilled in the art at the time of the invention to construct the brush holder of the Applicant's admitted prior art with the premold of Murata to support the conductor within the resin mold during the injection molding process.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art and Murata, in further view of Barber et al.(Barber). The Applicant's admitted prior art and Murata teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Barber teaches that polyphenylene sulfide is a suitable material for constructing brush holders. It would have been obvious to a person skilled in the art at the time of the invention to construct the brush holder of the Applicant's admitted prior art and Murata with the brush holder made of polyphenylene sulfide resin because Barber teaches that polyphenylene sulfide resin provides a EMI/RFI suppression.

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12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art, in further view of Barber et al. (Barber). The Applicant's admitted prior art teaches every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Barber teaches that polyphenylene sulfide is a suitable material for constructing brush holders. It would have been obvious to a person skilled in the art at the time of the invention to construct the brush holder of the Applicant's admitted prior art with the brush holder made of polyphenylene sulfide resin because Barber teaches that polyphenylene sulfide resin provides a EMI/RFI suppression.

Response to Arguments

13. Applicant's arguments filed October 28, 1998 have been fully considered but they are not persuasive. Applicant's argument that Byrne does not teach an a deformation preventer is not persuasive. The insulating sheet 13 connects the leads 17 so that the leads are structurally united to each other and are less likely to be deformed during encapsulation.

Conclusion

14. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066. The examiner can be normally contacted on Monday through Friday from 8:00 am to 5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703)308-1371. The facsimile number for the Group is (703)305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782.

KIT



January 2, 1999



NESTOR RAMIREZ
PRIMARY EXAMINER
GROUP 2800